

WHAT IS CLAIMED IS:

5      1. A filter comprising a filter housing with an inlet and an outlet for a fluid to be filtered, a filter cartridge arranged in said housing so that fluid from said inlet must flow through said filter cartridge to reach said outlet, and an additional functional part; said filter cartridge comprising an annularly constructed filter medium arranged between two axial end plates, and wherein said filter medium of said filter cartridge is provided with a lateral recess for accommodating said additional functional part of said filter.

10      2. A filter according to claim 1, wherein said filter medium is comprised of a folded sheet of filter material with lateral edges joined to form a tubular structure.

3. A filter according to claim 2, wherein said sheet of filter material is folded in zig-zag fashion to form a pleated structure.

4. A filter according to claim 2, wherein said lateral recess is a folded pocket formed by an enlarged distance between adjacent folds.

5      5. A filter according to claim 1, wherein said lateral recess in the filter medium of the filter cartridge extends axially at least to one of the end plates of the filter cartridge and said one end plate is provided with a notch which registers with said lateral recess in the filter medium.

6. A filter according to claim 1, wherein said functional part is a probe of a water level sensor.

7. A filter according to claim 1, wherein said functional part is suction tube of a liquid discharge.

8. A filter according to claim 1, wherein said housing comprises a housing cup and a housing cover, and wherein said functional part is mounted on said cover and extends into the lateral recess in the filter medium of the filter cartridge when the filter cartridge is installed in said housing.

9. A filter according to claim 1, wherein said filter is fuel filter for an internal combustion engine.

10. A filter cartridge comprising an annularly constructed filter medium arranged between two axial end plates, wherein the filter medium is provided with a lateral recess for accommodating a functional part of a filter in which the filter cartridge is to be installed.

11. A filter cartridge according to claim 10, wherein the two axial end plates are provided with notches aligned with the lateral recess in the filter medium so that said functional part can be inserted in an axial direction through one of the end plates into said lateral recess in the filter medium.

12. A filter cartridge according to claim 10, wherein said filter medium is a pleated filter sheet, and said lateral recess comprises a pocket formed by an enlarged spacing between two adjacent pleats.